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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/530,655

06/08/2005

Finn Danielsen

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9092

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7590

05/05/2008

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WASHINGTON, DC 20005

EXAMINER

ENSEY, BRIAN

ART UNIT

PAPER NUMBER

2615

MAIL DATE

DELIVERY MODE

05/05/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/530,655

**Applicant(s)**

DANIELSEN, FINN

**Examiner**

Brian Ensey

**Art Unit**

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 April 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-7 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 07 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-893)  
Paper No(s)/Mail Date 4/7/05  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 5 and 6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5 and 6 of copending Application No. 11/436,619. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the pending application are narrower in scope than those of the co-pending application and meet the limitations of current management in a battery powered device including comparing actual supply voltage from the battery with a fixed reference voltage, generating a control signal whenever the supply voltage is below the reference voltage, using the control signal to reduce the load current in the battery powered device, whereby the supply voltage from the battery will increase, repeating the steps as long as the supply voltage is below the reference voltage.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Specification***

The disclosure is objected to because of the following informalities: References to the merits of the claims must be deleted from the specification since at any time during prosecution, these claims may be amended or deleted. See page 2, line 16 and line 23 and page 3, line 7 and line 12.

Appropriate correction is required.

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5 and 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Seligman U.S. Patent No. 7,120,500.

Regarding claim 1, Seligman discloses a method of current management in a battery powered amplifier in a hearing aid device (See col. 2, line 9, cochlear implant), the method comprising the following steps: a--comparing the actual supply voltage from the with a fixed reference voltage battery (See col. 4, lines 11-13), b--generating a control signal whenever the supply voltage is below the reference voltage (See col. 4, lines 11 and 12), c--use the control signal to reduce the load current in the battery powered device (See col. 4, lines 21-24), whereby the supply voltage from the battery will increase, repeat steps a, b and c as long as the supply voltage is below the reference voltage (See col. 4, lines 50-61). Seligman does not expressly disclose the repetition frequency of steps a, b and c is higher than the highest audio frequency of the hearing aid. However, Seligman teaches the battery voltage is continuously monitored for changes in voltage level (See col. 2, lines 3-6). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention that the continuous monitoring of the battery

performance is higher than the highest audio frequency of the hearing aid since the highest audio frequency of the hearing aid is limited to the normal hearing range with a maximum value of about 20 kHz.

Regarding claim 2, Seligman further disclose the reference voltage is above a critical supply voltage of the hearing aid (See col. 4, lines 21-31 (If reference voltage gets too low, the simulation rate reaches a preset level and the device is shut down).

Regarding claim 3, Seligman further discloses the battery is a zinc-air battery (See col. 1, lines 26-27, typical in cochlear implant devices).

Regarding claim 5, Seligman discloses a battery powered amplifier in a hearing aid device with a battery giving a supply voltage to the device (See col. 2, line 9, cochlear implant), whereby means are provided for generating a fixed reference voltage (threshold set) and means for comparing the supply voltage with the reference voltage (See col. 4, lines 10-13), and where the comparing means are arranged to deliver a control signal to the device whenever the supply voltage is below the reference voltage (See col. 4, lines 11 and 12), and where the device has means for reducing its current load at the receipt of the control signal (See col. 4, lines 50-61). Seligman does not expressly disclose the comparing means are arranged to conduct the comparing at a repetition frequency, which is above the highest audio frequency of the hearing aid. However, Seligman teaches the battery voltage is continuously monitored for changes in voltage level (See col. 2, lines 3-6). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention that the continuous monitoring of the battery performance is higher than the highest audio frequency of the hearing aid since the highest audio frequency of the hearing aid is limited to the normal hearing range with a maximum value of about 20 kHz.

Regarding claim 6, Seligman further discloses the battery is a zinc-air battery (See col. 1, lines 26-27, typical in cochlear implant devices).

Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seligman as applied to claims 1 and 5 above, and further in view of Engebretson U.S. Patent No. 5,024,224.

Regarding claims 4 and 7, Seligman discloses a battery powered implanted medical device (cochlear implant). Seligman does not expressly disclose said battery is rechargeable. However, the use of rechargeable batteries in implantable medical devices is well known in the art and Engebretson teaches and implantable medical device with a rechargeable battery (See col. 3, lines 27-40). Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a rechargeable battery in the device of Seligman to minimize the requirements of battery replacement through surgery.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Ensey whose telephone number is 571-272-7496. The examiner can normally be reached on Monday - Friday 6:00 AM - 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
P.O. Box 1450  
Alexandria, Va. 22313-1450

**Or faxed to:**

(571) 273-8300, for formal communications intended for entry and for

Art Unit: 2615

informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand-delivered responses should be brought to:

Customer Service Window  
Randolph Building  
401 Dulany Street  
Arlington, VA 22314

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian Ensey/  
Primary Examiner, Art Unit 2615  
May 1, 2008